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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte JAMES E. JACKSON

Appeal 2016-005167
Application 11/668,564[1]
Technology Center 2100

Before JASON V. MORGAN, CATHERINE SHIANG, and SHARON FENICK, *Administrative Patent Judges*.

MORGAN, *Administrative Patent Judge*.

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[1] Appellant identifies International Business Machines Corporation as the real party in interest. App. Br. 1. This appeal is related to Appeal No. 2011-011444, decided May 5, 2014, which Appellant did not identify as being related. App. Br. 2. We remind Appellant of the duty to identify

> all other prior and pending appeals, interferences, trials before the Board, or judicial proceedings . . . [that] involve an application or patent owned by the appellant or assignee, are known to appellant, the appellant's legal representative, or assignee, and may be related to, directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

37 C.F.R. § 41.37(c)(ii) (2014).

DECISION ON APPEAL

Introduction

This is an appeal under 35 U.S.C. § 134(a) from the Examiner's final rejection of claims 1–6 and 8–25. Claim 7 is canceled. We have jurisdiction under 35 U.S.C. § 6(b).

We REVERSE and enter a NEW GROUND OF REJECTION.

Invention

Appellant invented "a method, system, and program product for creating and/or using unified dynamic information systems that integrate human process data and, optionally, technology component data." Abstract.

Exemplary Claim

Claim 1, reproduced below with key limitations emphasized, is exemplary:

> 1. A method for integrating human process data and technology component data in a unified dynamic information system (UDIS), the method comprising:
>
> embedding a unifying metasystem in a dynamic information system (DIS) using a computer system processing unit, wherein the DIS is stored in a memory of the computer system and contains technology component metadata;
>
> *linking human process metadata with the technology component metadata in the unifying metasystem using the computer system processing unit and a metadata linking system stored in the memory of the computer system*; and
>
> employing the metasystem to carry out a task related to the UDIS.

Rejection

The Examiner rejects claims 1–6 and 8–25 under 35 U.S.C. § 102(b) as being anticipated by Thanathip Sum-im, *Economic Dispatch by Ant*

Colony Search Algorithm, Proceedings of the 2004 IEEE Conf. on Cybernetics and Intelligent Systems, Singapore, 416–21 (2004) ("Sum-im").

ANALYSIS

Issue: Do the Examiner's findings show Sum-im discloses "linking human process metadata with the technology component metadata in the unifying metasystem using the computer system processing unit and a metadata linking system stored in the memory of the computer system," as recited in claim 1?

Sum-im's discloses a power system having N units constrained such that—in attempting to minimize the total fuel cost at thermal power plants (i.e., the economic dispatch problem)—the total output generation of the N units

$$\sum_{i=1}^{N} P_i$$

must equal the sum of the total power demand (P_D) and the total real power loss in system transmission (P_L). Sum-im 417, eq. 2. In rejecting claim 1, the Examiner finds Sum-im's equation and related disclosure anticipates the claimed linking of human process metadata (the total power demand) with the technology component metadata (the total real power loss). Final Act. 3–4 (citing Sum-im 417, eq. 2); Ans. 24.

Appellant contends the Examiner erred because merely using an equation to note the existence of a relationship between total power demand and total real power loss in system transmission falls short of disclosing the *linking* of *human process metadata with technology component metadata in a unifying metasystem*. *See* App. Br. 8–9; Reply Br. 6. We agree with Appellant that the Examiner erred. The equation on which Appellant relies

$$\sum_{i=1}^{N} P_i - P_D - P_L = 0$$

merely represents a power balance constraint for power systems (i.e., power generated in excess of demand is lost).

The Examiner finds that Sum-im's total real power demand (P_D) discloses *human process metadata*. Ans. 3–4 (citing Sum-im 417; Spec. ¶ 33). However, the Examiner does not cite to persuasive evidence that Sum-im's total real power demand necessarily relates to a human process such as "data related to the use, operation, maintenance and/or management of the system" (Spec. ¶ 33). Sum-im's total real power demand is, in fact, part of IEEE 30 bus test system, with the demand determined by a daily load curve rather than by human processes. *See* Sum-im 416, 420–21.

Because the Examiner's findings do not show that Sum-im's total real power demand discloses *human process metadata*, such findings do not show that Sum-im's power balance constraint equation discloses "linking human process metadata with the technology component metadata in the unifying metasystem using the computer system processing unit and a metadata linking system stored in the memory of the computer system," as recited in claim 1.

Accordingly, we do not sustain the Examiner's 35 U.S.C. § 102(b) rejection of claim 1, and claims 2–6 and 8–25, which contain similar recitations.

NEW GROUND OF REJECTION

Pursuant to 37 C.F.R. § 41.50(b), we enter a new ground of rejection of claims 1–6 and 8–25 under 35 U.S.C. § 101 as being directed to non-statutory subject matter.

Claim 1, which is directed to a method for integrating human process data and technology component data in a unified dynamic information system, is representative. The claimed method includes steps directed to embedding a unifying metasystem in a dynamic information system, linking human process metadata with technology component metadata in the unifying system, and employing the metasystem to carry out tasks related to the unified dynamic information system.

To determine whether claims are patent eligible under § 101, we apply the Supreme Court's two-step test articulated in *Alice Corp. Party v. CLS Bank International*, 134 S. Ct. 2347 (2014). First, we determine whether the claims are directed to a patent-ineligible concept: laws of nature, natural phenomena, and abstract ideas. *Id.* at 2354–55. If so, we then proceed to the second step and "examine the elements of the claim to determine whether it contains an 'inventive concept' sufficient to 'transform' the claimed abstract idea into a patent-eligible application." *Id.* at 2357 (quoting *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 566 U.S. 66, 72–73, 79–80 (2012)). The Supreme Court has explained that "the mere recitation of a generic computer cannot transform a patent ineligible abstract idea into a patent-eligible invention." *Alice*, 134 S. Ct. at 2358.

First we note that the claimed steps, given a reasonably broad interpretation in light of the Specification, encompass human-driven diagramming of a dynamic information system (an abstract idea) on a computer system within that dynamic information system and describing human process metadata as part of the diagram. An example of a type of diagram that may be developed as part of such a system is illustrated—albeit without human process metadata being linked (e.g., diagramed)—is the abstract viable system model. *See* claim 5; Spec. Fig. 1, ¶¶ 10–11, 23–24.

Next, we recognize that the method is limited to applications that involve a computer system. In particular, the dynamic information system is stored in a memory of a computer system and the linking of human process metadata with technology component metadata is performed using the computer system processing unit and a metadata linking system stored in the memory of the computer system. Further, the metasystem is employed to carry out a task related to the unified dynamic information system.

Nonetheless, the use of a computer system in the claimed manner encompasses merely using the computer system as a diagram tool for human-driven diagramming. That is, the claim encompasses a diagram stored in a computer memory, where the diagram includes a component, such as a diagram arrow, to link human process metadata and technology component metadata. *See* Spec. Fig. 6, ¶¶ 34, 42. Moreover, the employing step encompasses merely rendering a diagram for use in a task related to the unified dynamic information system. *See* claims 4, 5. "[M]ere recitation of a generic computer cannot transform a patent-ineligible abstract idea into a patent-eligible invention." *Alice*, 134 S. Ct. at 2358. A method broadly directed to diagramming processes and system, even when the processes and

systems involve a computer on which the diagram is rendered, is not directed to anything significantly more than a patent-ineligible abstract idea, and thus the invention of claim 1 is directed to patent-ineligible subject matter.

For these reasons, we newly reject claim 1 under 35 U.S.C. § 101 as being directed to non-statutory subject matter. Claims 2–6 and 8–25 are similarly deficient. That is, their limitations fail to transform the abstract idea of diagramming processes in a system into patent-eligible matter. Therefore, we also newly reject claims 2–6 and 8–25 under 35 U.S.C. § 101 as being directed to non-statutory subject matter.

DECISION

We reverse the Examiner's decision rejecting claims 1–6 and 8–25.

We newly reject claims 1–6 and 8–25 under 35 U.S.C. § 101.

This Decision contains a new ground of rejection pursuant to 37 C.F.R. § 41.50(b). Section 41.50(b) provides "[a] new ground of rejection pursuant to this paragraph shall not be considered final for judicial review." Section 41.50(b) also provides:

> When the Board enters such a non-final decision, the appellant, within two months from the date of the decision, must exercise one of the following two options with respect to the new ground of rejection to avoid termination of the appeal as to the rejected claims:
>
> (1) *Reopen prosecution.* Submit an appropriate amendment of the claims so rejected or new Evidence relating to the claims so rejected, or both, and have the matter reconsidered by the examiner, in which event the prosecution will be remanded to the examiner. The new ground of rejection is binding upon the examiner unless an amendment or

> new Evidence not previously of Record is made which, in the opinion of the examiner, overcomes the new ground of rejection designated in the decision. Should the examiner reject the claims, appellant may again appeal to the Board pursuant to this subpart.
>
> (2) *Request rehearing*. Request that the proceeding be reheard under § 41.52 by the Board upon the same Record. The request for rehearing must address any new ground of rejection and state with particularity the points believed to have been misapprehended or overlooked in entering the new ground of rejection and also state all other grounds upon which rehearing is sought.

Further guidance on responding to a new ground of rejection can be found in the Manual of Patent Examining Procedure § 1214.01.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a). *See* 37 C.F.R. § 41.50(f).

REVERSED
37 C.F.R. § 41.50(b)